STATE FOREST LAND ENVIRONMENTAL CHECKLIST

Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decided whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can. Questions in italics are supplemental to Ecology's standard environmental checklist. They have been added by the DNR to assist in the review of state forestland proposals. Adjacency and landscape/ watershed-administrative-unit (WAU) maps for this proposal are available on the DNR internet website at http://www.dnr.wa.gov under "SEPA" Center." These maps may also be reviewed at the DNR regional office responsible for the proposal. This checklist is to be used for SEPA evaluation of state forest land activities.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later. All of the questions are intended to address the complete proposal as described by your response to question A-11. The proposal acres in question A-11 may cover a larger area than the forest practice application acres, or the actual timber sale acres.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON PROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer" and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

> Agreement #: 30-076299 Timber Sale Name: Cow Town

- 2. Name of applicant: Department of Natural Resources
- 3. Address and phone number of applicant and contact person:

Pacific Cascade Region 601 Bond Road PO Box 280 Castle Rock, Washington 98611-0280 Phone: (306) 274-2035

Contact Person: Eric Wisch

- 4. Date checklist prepared: March 2004
- 5. Agency requesting checklist: Department of Natural Resources
- 6. Proposed timing or schedule (including phasing, if applicable):
 - Auction Date: FY-2005
 - Planned contract end date (but may be extended) FY-07 b.
 - c. Phasing:
- 7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

Yes

Timber Sale

- Site preparation: Site preparation will be conducted during harvest and post harvest as needed. a.
- Regeneration Method: The units will be planted post harvest with commercial stock species. b.
- Vegetation Management: Sites will be surveyed and scheduled for treatment if necessary. c.
- А Thinning: Pre-commercial and commercial thinnings may be scheduled in the future.

Roads: Road maintenance assessments will be conducted periodically and may include periodic ditch and culvert cleanout, and road grading as necessary.

Rock Pits and/or Sale: The pit will be maintained in a safe condition with proper drainage. The rock pit may be used for other current or future projects in the vicinity.

 $\underline{\it Other:}$ Direct sale of firewood from the sale area may occur following harvest completion. Firewood salvage of logging residue may occur following harvest.

8.	List ar	y environment	al information you know about that has been prepared, or will be prepared, directly related to this proposal.
	\Box Lar	dscape plan:	ter body in WAU: \square temp. \square sediment \square completed TMDL (total maximum daily load):
	∏Inte ⊠Roo	ıd design plan:	s: vam (ID Team) report: Road Plan available at Pacific Cascade Region
	\Box Geo	dlife report: otechnical repo	
	$\square Me$		nderstanding (sportsmen's groups, neighborhood associations, tribes, etc.):
	⊠Oth DNR (er: Spotted ov GIS databases,	d Plan available at Pacific Cascade Region which habitat mapping, Forest Practices Activity Maps, Forest Resource Plan (DNR, July 1992), State soil survey, Habitat Conservation Plan (January, 1997), HCP Checklist (attached), Planning and Tracking Special associated maps.
9.		u know whether or proposal? If y	r applications are pending for governmental approvals of other proposals directly affecting the property covered ves, explain.
	NO		
10.	List ar	y government a	approvals or permits that will be needed for your proposal, if known.
			A for type 4 and 5 waters Burning permit
		reline permit dental take per	mit 1168 and PRT-812521 \(\subseteq FPA. 2910398 \subseteq Other:
11.	questi	ons later in this	description of our proposal, including the proposed uses and the size of the project and site. There are several checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on cies may modify this form to include specific information on project description.)
	a.		roposal description:
			Total Volume: 3071 Mbf
		Unit 1: 185 Unit 2: 266	54 Mbf
		Unit 3: 222	, Mbf
		L R	oss Proposal Acres: 9 eave Tree Areas: .5 MZ Acres: 4.5 et Harvest Acres: 4
		L R	eross Proposal Acres: 85 eave Tree Acres: 5 MZ Acres: 15 et Harvest Acres: 65
		L R	eross Proposal Acres: 6 eave Tree Acres: 1 MZ Acres: 0 fet Harvest Acres: 5
		Total Leave	osal Area Acres (Gross): approximately 100 e Tree Acres: 6.5 d Acres: 19.5
			Iarvest Acres: 74
	b.		nd description pre-harvest (include major timber species and origin date), type of harvest, overall unit objectives.
		and manag the sale are	it Objective: The primary objective of this timber harvest is to provide financial benefit to trust beneficiaries e the area for continued forest resource management. In addition, unique wildlife habitat located throughout a will be protected. This stand will be managed in a manner that protects site productivity and maintains the d water quality of streams.
		conifer and	t Stand Description: The forest stands have an average age of 65 to 75 years old. The stands contain mixed hardwood species. Douglas fir is the dominant conifer species. Younger alder and fir stands exist adjacent 2 and 3. Unit 2 is also adjacent to a 65-year-old stand along the east boundary.
		Harvest Sys	tems: Ground based yarding and small amounts of cable yarding systems will be used to harvest these units.
	c.	Road activi	ty summary. See also forest practice application (FPA) for maps and more details.
		Roadwork office.	is outlined below, with site-specific details in the timber sale road plan available at the Pacific Cascade Region
		Spur A is a remain ope	ative: Two new roads are planned for this proposal. The GM-1100 A Rd. is approximately 1360 feet long, pproximately 1229 feet long. Both roads will be abandoned at post harvest. The existing GM-1100 Rd. will n and be used for future land management activities. There are no live water crossings associated with the action. Construction will entail simple cut and fill design. Portions of the new construction on both roads may

be used as landing locations.

Approximately 617 feet of existing portion of Spur A will be abandoned post harvest and one fish barrier will be removed.

Both the GM-1100 A and Spur A may be used as dirt spurs if hauling during dry season conditions but must be rocked if during wet season conditions.

Rock Pits: Rock for this sale will come from the existing GM-1200 pit.

Tours of Astinitus	How	Length (feet)	Acres	Ei-l- Dawin Damanla (#)
Type of Activity	Many	(Estimated)	(Estimated)	Fish Barrier Removals (#)
Construction		2600	.9	
Reconstruction		600		
Abandonment		3200	1.2	1
Bridge Install/Replace				
Culvert Install/Replace (fish)				
Culvert Install/Replace (no fish)	4			

Temporary roads: A <u>temporary road</u> is <u>defined</u> in Forest Practice rules as a forest road that is constructed and intended for use during the life of the approved forest practices application. All temporary roads must be abandoned in accordance with WAC 222-24-052(3). The length listed above is also included in the "Construction" and "Abandonment" sections of the chart above.

- 12. Location of proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. (See timber sale map. See also color landscape/WAU map on the DNR website http://www.dnr.wa.gov under "SEPA Center.")
 - a. Legal description: These units are in Section 31, T6N R3E and Section 36, T6N R2E.
 - b. Distance and direction from nearest town (include road names): The proposal lies approximately 17 miles East of Woodland, WA. via Cedar Creek Road. See an attached timber sale map.
 - c. Identify the watershed administrative unit (WAU), the WAU Sub-basin(s), and acres. (See also landscape/WAU map on DNR website http://www.dnr.wa.gov under "SEPA Center.")

WAU Name	WAU Acres	DNR WAU Acres	Sub-Basin Number	Sub-Basin Acres	DNR Sub-Basin Acres	Proposal Acres in Sub-Basin
						(estimated)
Cedar Creek	36405	3999	3	3313	1177	100

The acreages listed above are from DNR /HCP/ WAU data layers. *Note, the proposed acres in the sub-basin reflect total gross acres, not net harvestable acres.

13. Discuss any known future activities not associated with this proposal that may result in a cumulative change in the environment when combined with the past and current proposal(s). (See digital ortho-photos for WAU and adjacency maps on DNR website http://www.dnr.wa.gov under "SEPA Center" for a broader landscape perspective.)

Known and Observed WAU conditions: The majority of the Cedar Creek WAU is managed for commercial timber production. The DNR manages 10% of the WAU and private industrial timber companies manage much of the rest. Some agricultural land and rural residential properties are present around the Cedar Creek area. After harvest, approximately 53% of the Cedar Creek WAU on DNR ownership will contain stands greater than 25 years old.

Two proposed FY-05 sales within the WAU are candidates for regeneration and commercial thinning harvests. Additional roads may be built for forest management activities and additional pit development is expected. The high site potential of this area makes it suitable for continued forest management. Protection of riparian and upland ecosystems has been implemented on the more recent State sales within the WAU (FY 1997 to present). Riparian zones, maintaining critical habitat and hydrological functions, have been utilized where needed. Road abandonment plans address reducing the road miles on State land. These combined mitigation measures should ensure that such activities will have minimal environmental impact within the sub-basins and WAU.

Mitigation elements: A variety of mitigation measures have been incorporated into the design of this sale to ensure that the water quality and habitat management standards of the HCP will be met. These same measures will be implemented on future sales in the area.

- RMZ's averaging 200 feet on type 3 streams and at least 100 feet on type 4 streams, in addition to 640 leave trees will be left for protection of water quality and preserving forest floor ecosystems.
- Road construction will include culverts and/or ditches as needed to provide drainage onto stable forest floors.
- Restrictions for hauling and ground-based yarding will be implemented to protect water quality and soil damage.
 Cable yarding will require lead-end suspension on slopes greater than 50%.
- Ground yarding restrictions are prescribed to minimize soil impacts including compaction and rutting.

Timber harvest locations in the immediate area follow department guidelines to ensure that green-up requirements are met. RMZ protection for the major watercourse will continue to provide important riparian habitat and mitigate for potential peak flow events. The combination of site-specific measures for this proposal and overall landscape objectives should minimize adverse environmental impacts.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a.	General	description	of the site	(check one):
a.	Ochciai	description	or the site	(CHCCK OHC).

☐Flat, ☐Rolling, ☐Hilly, ☐Steep Slopes, ☐Mountainous, ☐Other:

1) General description of the WAU or sub-basin(s) (landforms, climate, elevations, and forest vegetation zone).

The Cedar Creek WAU drains into Cedar Creek and covers 36,405 acres, 10% of which is managed by the State. The WAU is generally categorized as rolling/hilly uplands with lowland flood plains. Elevations range between 400-2000 feet. The WAU receives approximately 50-75 inches of precipitation annually, with about 70% of it falling during the five-month period from October to March. The primary forest type is even-aged Douglas-fir forest, though over half the WAU is not under forest cover. Approximately 5% of the area (1,770 acres) is in the rain-on-snow zone.

2) Identify any difference between the proposal location and the general description of the WAU or sub-basin(s).

The proposal location is similar to the rest of the WAU and is outside the rain-on-snow zone.

. What is the steepest slope on the site (approximate percent slope)?

55% slopes exist in a small portion of the proposal.

What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. Note: The following table is created from state soil survey data. It is a roll-up of general soils information for the soils found in the entire sale area. It is only one of several site assessment tools used in conjunction with actual site inspections for slope stability concerns or erosion potential. It can help indicate potential for shallow, rapid soil movement, but often does not represent deeper soil sub-strata. The actual soils conditions in the sale area may vary considerably based on land-form shapes, presence of erosive situations, and other factors. The state soil survey is a compilation of various surveys with different standards.

The acres listed in the soils table below are for those areas where timber harvest takes place.

State Soil	Soil Texture	% Slope	Acres	Mass Wasting	Erosion
Survey #				Potential	Potential
1103	Cinebar	20-30	41	low	medium
1105	Cinebar	30-65	15	low	medium
1105 3909	Cinebar Kinney	30-65 30-65	15 18	low low	medium medium

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.
 - 1) Surface indications: None
 - Is there evidence of natural slope failures in the sub-basin(s)?
 No ☐Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:
 - 3) Are there slope failures in the sub-basin(s) associated with timber harvest activities or roads? ⊠No ☐ Yes, type of failures (shallow vs. deep-seated) and failure site characteristics: Associated management activity:
 - *Is the proposed site similar to sites where slope failures have occurred previously in the sub-basin(s)?*

 No

 Yes, describe similarities between the conditions and activities on these sites:
 - 5) Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal.

Slope stability protection measures: None

- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

 *Approx. acreage new roads: 0.4 Acre in Right-of-Way *Approx. acreage new landings: .5 acre Fill source: Fill source is native material.
- **f.** Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Yes, some incidental erosion may occur as a result of this proposal, but should be confined to the associated roads and harvest area. See B. 1. h. below for mitigation.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? Approximate percent of proposal in permanent road running surface (includes gravel roads):

None

h. Propose measures to reduce or control erosion, or other impacts to the earth, if any: (Include protection measures for minimizing compaction or rutting.)

<u>Protection measures to reduce erosion associated with roads:</u>

- Seasonal timing restrictions will be used to minimize road construction activities during wet weather conditions.
- Soils exposed during road construction, including any waste areas, will be treated with erosion control measures such as re-vegetation.

- Roads will be maintained as needed to control water runoff and avoid delivery of sediment to live water.
- Drainage structures will be properly installed and maintained.
- Sediment control measures will be used as necessary during active haul to prevent sediment delivery to water.
- Timing restrictions or temporary road shutdown will be used as necessary during active haul to prevent sediment delivery to water.
- Periodic maintenance and inspection of the road system to insure proper function.

<u>Protection measures to reduce erosion associated with active logging operation:</u>

- Ground yarding will be restricted to slopes less than 40%.
- Cable yarding areas will maintain lead-end suspension will be required on slopes greater than 50%.
- · Ground yarding restrictions are prescribed to minimize soil impacts including compaction and rutting.
- Skid trails, if utilized, will be water barred as necessary to minimize sediment delivery to live water.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust *from truck traffic, rock mining, crushing or hauling*, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Minor amounts of engine exhaust from logging equipment and dust from vehicle traffic and logging equipment.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

None.

3. Water

- a. Surface:
 - 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. (See timber sale map and forest practice base maps.)

Unit 1 of the proposal area has one Type 3 stream on the eastern boundary. This same Type 3 stream is adjacent to the western boundary of Unit 2.

Unit 2 has one Type 3 stream (Pup Creek), one Type 4 stream and one Type 5 stream all on the eastern boundary and all connected. Another Type 5 stream exists in the southwest corner of Unit 2. All streams have been typed using the Interim Water Typing criteria in the Forest Practices rules.

- a) Downstream water bodies: Pup Creek and Cedar Creek
- b) Complete the following riparian & wetland management zone table:

Wetland, Stream, Lake,	Water Type	Number	Avg RMZ/WMZ Width in
Pond, or Saltwater Name		(how many?)	Feet (per side for streams)
(if any)			
Pup Creek	3	1	200
Unnamed	3	1	200
Unnamed	4	1	100
Unnamed	5	2	N/A

- c) List RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures, and wind buffers.
 - A 100-year site index buffer was used for the Type 3 RMZ's along the east boundary of Unit 1 and west and east boundaries of Unit 2.
 - The Type 4 water was protected with a 100-foot RMZ and the Type 5 waters within Unit 2 were treated as leave tree areas.
- 2) Will the project require any work over, in, or adjacent to (within 200 feet) to the described waters? If yes, please describe and attach available plans.

☐No ☐Yes (See RMZ/WMZ table above and timber sale map.)
Description (include culverts):

- No harvesting will occur within 200-feet from the Type 3 streams.
- No harvesting will occur within 100-feet from the Type 4 stream.
- No equipment will come within 30-feet from the Type 5 waters.
- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Minimal fill will be used for road construction.

Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. (*Include diversions for fish-passage culvert installation*.)
 No ☐Yes, description:

5)	Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. $\square No \square Yes$, describe location:
6)	Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. No Yes, type and volume:
7)	Does the sub-basin contain soils or terrain susceptible to surface erosion and/or mass wasting? What is the potential for eroded material to enter surface water?
	In general, the WAU has low soil erosion and mass wasting potential. The percentage of soils being unstable when disturbed is insignificant. Approximately 1% of the WAU (about 338 acres) is rated as possessing high soil mass wasting potential, whereas 99% of the area is considered to have either insignificant or low mass wasting potential. The proposal is situated away from those areas having a higher potential for mass wasting and soil erosion.
8)	Is there evidence of changes to the channels in the WAU and sub-basin(s) due to surface erosion or mass wastin (accelerated aggradations, erosion, decrease in large organic debris (LOD), and change in channel dimensions)? No Xyes, describe changes and possible causes:
	Some evidence of channel degradation during high precipitation events is noted in the tributaries of Pup Creek. Changes can be attributed to past land resource alterations including agricultural and residential conversions along Pup Creek and Cedar Creek Roads.
9)	Could this proposal affect water quality based on the answers to the questions 1-8 above? $\square No \ \square Yes$, explain:
	This proposal may cause some minimal increase in sedimentation as a result of road construction and harvest operations. Buffered riparian areas will help preserve natural stream channels and water quality.
10)	What are the approximate road miles per square mile in the WAU and sub-basin(s)?
	Road miles per square mile within the Cedar Creek WAU are approximately 5.0. Road miles per square mile within sub-basin #3 are approximately 2.0.
	Are you aware of areas where forest roads or road ditches intercept sub-surface flow and deliver surface water to streams, rather than back to the forest floor? $\square No \ \square Yes$, describe:
	Some roads may intercept surface flow and deliver ditch water to live water. This typically occurs on high rain events and is not common adjacent to the proposal.
11)	Is the proposal within a significant rain-on-snow (ROS) zone? If not, STOP HERE and go to question B-3-a-1s below. Use the WAU <u>or</u> sub-basin(s) for the ROS percentage questions below. ⊠No ∐Yes, approximate percent of WAU in significant ROS zone. Approximate percent of sub-basin(s):
12)	If the proposal is within the significant ROS zone, what is the approximate percentage of the WAU <u>or</u> subbasin(s) within the significant ROS zone (all ownerships) that is (are) rated as hydrologically mature?
13)	Is there evidence of changes to channels associated with peak flows in the WAU <u>or</u> sub-basin(s)? \square No \boxtimes Yes, describe observations:
	In the winter of 1996, a 100-year event occurred. The rainstorm set rainfall and flood level records in Southwest Washington and Northwestern Oregon. The event caused many shallow mass-wasting events. Many stream channels were affected by this flood event. The full extent if this is not known. Many channels were altered in this event, due to high stream flows with accompanying sediment loads and possibly large woody debris delivery.
14)	Based on your answers to questions B-3-a-10 through B-3-a-13 above, describe whether and how this proposal in combination with other past, current, or reasonably foreseeable proposals in the WAU and sub-basin(s), magnetibute to a peak flow impact.
	This proposal may slightly change the timing/duration/amount of peak flow. Flow rates may increase slightly during low flow periods during the first decade of the new forest. See B.33a.16 below.
15)	Is there water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity that could be affected by changes in surface water amounts, quality, or movements as a result of this proposal? ⊠No □Yes, possible impacts:
16)	Based on your answers to questions B-3-a-10 through B-3-a-15 above, note any protection measures addressing possible peak flow/flooding impacts.
	Harvesting will occur approximately 200-feet from all Type 3 streams adjacent to the proposal and will not affect Pup Creek or Cedar Creek. The Type 4 stream on the east boundary of Unit 2 has received a 100-foot buffer and no activity will occur near this stream that could cause negative water impacts.

b. Ground Water:

		purpose, and approximate quantities if known.
		No.
		Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.
		Minor amounts of oil, fuel and other lubricants may inadvertently be discharged to the ground as a resul of heavy equipment use or mechanical failure. No lubricants will be disposed of on-site.
		3) Is there a water resource use (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or down slope of the proposed activity that could be affected by changes in groundwater amounts, timing, or movements as a result this proposal? No Yes, describe:
		a) Note protection measures, if any.
	c.	Water Runoff (including storm water):
		1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.
		Storm water will be collected in the ditches and culverts and discharged onto the forest floor.
		2) Could waste materials enter ground or surface waters? If so, generally describe.
		Minimal logging slash may enter surface water.
		a) Note protection measures, if any.
	d.	Proposed measures to reduce or control surface, ground, and runoff water impacts, if any: (See surface water, ground water, and water runoff sections above, questions B-3-a-1-c, B-3-a-16, B-3-b-3-a, and B-3-c-2-a.)
		See B.1.h above for additional erosion control measures.
1.	Plants	
	a.	Check or circle types of vegetation found on the site:
		grass pasture crop or grain wet soil plants: Cattail, buttercup, bullrush, skunk cabbage, devil's club, other:
		water plants: water lily, eelgrass, milfoil, other: other types of vegetation: Vine Maple plant communities of concern:
	b.	What kind and amount of vegetation will be removed or altered? (See answers to questions A-11-a, A-11-b, B-3-a-1-b and B 3-a-1-c. The following sub-questions merely supplement those answers.)
		Commercial timber species will be harvested throughout the three units, primarily Douglas fir, red alder and maple. Approximately 3071 Mbf of timber will be harvested. Leave tree areas, RMZs and younger, non-merchantable timber will be left on site.
		1) Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. (See landscape/WAU and adjacency maps on the DNR website at: http://www.dnr.wa.gov under "SEPA Center.")
		Unit 1 of the proposal area has a private landowner regeneration harvest on the west boundary, young alde and fir to the north and south and 65-75 year old Douglas fir (part of 200 foot RMZ) to the east. Unit 2 has 65-75 year old Douglas fir stands to the east and south of the unit and a combination of 15-year-old fir and alder to the northwest, 65-75 year old Douglas fir (green up zone) to the north and a 35-45 year old commercial thinning stand to the northeast and 65-75 year old Douglas fir (part of 200 foot RMZ) to the west.
		Unit 3 is surrounded on all sides by a 35-45 year old conifer stand.
		2) Retention tree plan:
		Leave tree design focused on water quality, visual impacts and other unique forest conditions. Eight trees per acre were left in the harvest areas. Several large leave tree clumps and individual scattered trees were retained throughout the units. Some larger dominant trees were retained for legacy purposes and snags were considered in leave tree distribution. The Type 5 waters were treated as leave tree areas. The total number of leave trees for this proposal is 640.
	C	List threatened or endangered <i>plant</i> species known to be on or near the site

Will ground water be withdrawn, or will water be discharged to ground water? Give general description,

1)

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TSU Number	FMU_ID	Common Name	Federal Listing Status	WA State Listing Status
None found in database search				

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:
 - No entry Riparian Management Zones were placed along the Type 3 and 4 streams to maintain the riparian plant structure.
 - After harvest, the units will be planted with Douglas fir and Western Red Cedar seedlings.
 - Leave trees left in clumps and scattered throughout the units will aid in natural reforestation.

5. Animal

υ.	TSU Number None found in database search	FMU_ID	Common Name	Federal Listing Status	WA State Listing Statu
υ.	TOU Number	EMIL ID	Common Name	Fodoral Listing Status	WA State Lieting State
υ.					
b.	List any threatened or endangered		vn to be on or near the	e site (include federal- and sta	ate-listed species).
	unique habitats:talus slopes, [\times_other: beaver	□caves, □			rings
	mammals: ⊠deer, ⊠bear, ⊠ell fish: □bass, □salmon, ⊠trout,			···	
				ner.	
	birds: ⊠hawk, □heron, □eagle	a Econobi	rds Oniggon Oot	hor:	
	near the site:				

c. Is the site part of a migration route? If so, explain.

\[\int Pacific flyway \quad \int Other migration route: \quad Explain if any boxes checked: \]

This proposal is located in the Columbia River flyway, which is part of the Pacific Northwest forests. Many Neotropical birds are closely associated with riparian areas, cliffs, snags and structurally unique trees. Riparian areas and special habitats are protected through implementation of DNR's Habitat Conservation Plan. Migratory waterfowl also use the Columbia River flyway. The area for this proposal is not generally the type of area used for resting or feeding by migratory waterfowl. This proposal is also located within Lower Columbia River steelhead, Chinook and Columbia River Chum Evolutionary Significant Units (ESU facilitate cable yarding on difficult terrain (topography)s). This proposal of fish bearing streams should protect any potential salmonoid habitat present.

- d. Proposed measures to preserve or enhance wildlife, if any:
 - Leave tree areas distributed throughout the proposal will provide forest canopy and forest floor habitat.
 - Snags left on site will continue to provide nesting habitat.
 - RMZs will maintain riparian plant structure and stream adjacent habitat.
 - This activity conforms to the 1992 Forest Resource Plan, the 1997 Habitat Conservation Plan and Forest Practices rules and regulations.

Note existing or proposed protection measures, if any, for the complete proposal described in question A-11.
 Species /Habitat: Protection Measures:

Species /Habitat: Protection Measures: Species /Habitat: Protection Measures:

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Does not apply.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

None.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Minimal health hazards due to operating heavy equipment and the minor spillage of fuel and lubricating oils are always present with this type of operation. Contractual clauses require operators to use established safety standards. The risk of forest fire may be increases for approximately two years following harvesting due to logging slash.

1) Describe special emergency services that might be required.

Department of Natural Resources, private and rural fire department fire suppression resources. Emergency medical or air ambulance for personnel injuries. Hazardous material spills may require Department of Ecology and/or county assistance.

2) Proposed measures to reduce or control environmental health hazards, if any:

Fire equipment will be required on-site during closed fire season. Operations will cease if relative humidity falls below 30%.

b. Noise

What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None.

2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from this site.

Heavy equipment, chain saws, yarding whistled and trucks will produce noise during periods of operation.

3) Proposed measures to reduce or control noise impacts, if any:

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? (Site includes the complete proposal, e.g. rock pits and access roads.)

Timber production, Forest management

b. Has the site been used for agriculture? If so, describe.

No.

c. Describe any structures on the site.

None.

d. Will any structures be demolished? If so, what?

No.

e. What is the current zoning classification of the site?

Forestland

f. What is the current comprehensive plan designation of the site?

Forestland

g. If applicable, what is the current shoreline master program designation of the site?

Not Applicable.

g. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

No

i. Approximately how many people would reside or work in the completed project?

None

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

None.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

These harvest units will be reforested with commercial species and retained as forestland.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None

c. Proposed measures to reduce or control housing impacts, if any:

None.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principle exterior building material(s) proposed?

Does not apply.

- b. What views in the immediate vicinity would be altered or obstructed?
 - Is this proposal visible from a residential area, town, city, developed recreation site, or a scenic vista?
 No ☐Yes, viewing location:
 - 2) Is this proposal visible from a major transportation or designated scenic corridor (county road, state or interstate highway, US route, river, or Columbia Gorge SMA)?
 No ☐Yes, scenic corridor name:
 - 3) How will this proposal affect any views described in 1) or 2) above?

Does not apply

c. Proposed measures to reduce or control aesthetic impacts, if any:

A total of eight trees per acre will be left in the proposal area, scattered individually and in large and small clumps throughout the harvest area. Reforestation will also be completed within one year after harvest and forest habitats will remain adjacent to streams.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

None.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light and glare impacts, if any:

None.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

Hunting, mountain biking and hiking.

b. Would the proposed project displace any existing recreational uses? If so, describe:

Recreational activities may be temporarily interrupted during periods of operation on the site.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

13. Historic and Cultural Preservation

a. Are there any places or objects listed on, or proposed for national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

No

 Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

None

c. Proposed measures to reduce or control impacts, if any:
(Include all meetings or consultations with tribes, archaeologists, anthropologists or other authorities.)

14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

See A.12.b and the timber sale vicinity map.

Is it likely that this proposal will contribute to an <u>existing</u> safety, noise, dust, maintenance, or other transportation impact problem(s)?

No.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

No.

c. How many parking spaces would the completed project have? How many would the project eliminate?

None.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

Some new forest roads will be constructed and some existing roads will be improved. See A.11.c for details.

1) How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all?

There will be no impact from this proposal.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

During harvest, 10-15 vehicle trips per day to the sale area may occur. This will take place for three to four months. Upon completion of harvest activities, traffic levels will resort back to normal use.

g. Proposed measures to reduce or control transportation impacts, if any:

None.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No.

b. Proposed measures to reduce or control direct impacts on public services, if any.

None.

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

None.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

None.

C.

SIGNATURE